

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1-19 are now present in this application. Claims 1 and 19 are independent. Claims 1, 2, 3, 5, 6, 7, 8, 13, 14, 16 and 19 have been amended.

Reconsideration of this application, as amended, is respectfully requested.

Reasons for Entry of Amendments

At the outset, it is respectfully requested that this Amendment be entered into the Official File in view of the fact that the amendments to the claims automatically place the application in condition for allowance.

In the alternative, if the Examiner does not agree that this application is in condition for allowance, it is respectfully requested that this Amendment be entered for the purpose of appeal. This Amendment reduces the issues on appeal by overcoming the prior art of record as provided in the Examiner's Interview conducted on November 18, 2003. This Amendment was not presented at an earlier date in view of the fact that Applicants did not fully appreciate the Examiner's position until the Final Office Action was reviewed.

Drawings

Applicants appreciate the Examiner's indication that the corrected formal drawings submitted on July 9, 2003 have been accepted.

Examiner Interview

Applicants wish to thank the Examiner for the courtesies extended to Applicants' representative during the interviews which were conducted on November 17-18, 2003. The Examiner agreed to provide an Examiner Interview Summary. During the interviews, Applicants' representative discussed the claim rejections with the Examiner in detail. Proposed changes to the claims were discussed in an attempt to overcome the prior art rejections of record. The claims have been amended in the manner discussed during the interview, and are believed to place the application into condition for allowance. Accordingly, reconsideration and allowance of the present application are respectfully requested.

Rejections under 35 U.S.C. §103

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Applicants' admitted Prior Art (assuming it is prior art) in

view of U.S. Patent No. 6,317,177B1 to Matsushita et al. (Matsushita). Claims 3-5, 7 and 19 stand rejected under 35 U.S.C. 103(a) over APA in view of Matsushita, as applied to claims 1 and 2, and further in view of U.S. Patent No. 5,808,708 to Oyama et al. (Oyama). Claims 8, 11, 13 and 14 stand rejected under 35 U.S.C. 103(a) over APA in view of Matsushita as applied to claim 2, and further in view of U.S. Patent No. 5,808,713 to Broer et al (Broer), and claim 15 stands rejected under 35 U.S.C. 103(a) over APA in view of Matsushita and Broer as applied to claim 14, and further in view of U.S. Patent No. 6,151,169 to Kim. Claim 16 stands rejected over APA in view of Matsushita and Broer as applied to claim 8 and further in view of Egawa. These rejections are respectfully traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

With regard to the rejection of the claims set forth in the Office Action, Applicants refer to the Examiner Interview and claim amendments submitted in connection therewith and respectfully submits that independent claims 1 and 19 (as amended) overcomes all of the stated art grounds of rejection. Reconsideration and withdrawal of these art grounds of rejection is respectfully requested.

Allowable Subject Matter

The Examiner states that claims 6, 9, 10, 12 and 17 contain allowable subject matter, and would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

Applicants thank the Examiner for the early indication of allowable subject matter in this application.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Percy L. Square, Registration No. 51,084, at (703) 205-8034, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By: Joseph A. Kolasch #41,458
Joseph A. Kolasch
Reg. No.: 22,463


JAK/PLS:ndb

P.O. Box 747
Falls Church, Virginia 22040-0747
Telephone: (703) 205-8000